

**PACKET DETECTION, SYNCHRONIZATION, AND FREQUENCY**  
**OFFSET ESTIMATION**

**ABSTRACT OF THE DISCLOSURE**

Techniques are disclosed for detecting a packet. One technique includes sampling  
5 a received signal to produce a sequence of samples wherein the sequence of samples  
includes a plurality of subsequences of samples; cross correlating the subsequences of  
samples with a known form of the subsequence to produce cross correlations; self  
correlating the cross correlations to produce a plurality of self correlations; summing the  
self correlations; and processing the sum of the self correlations.